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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,273	11/19/2003	Jun Wan	05-03-005	7403

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EXAMINER
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OCHOA, JUAN CARLOS

ART UNIT	PAPER NUMBER
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2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/717,273	<b>Applicant(s)</b> WAN ET AL.	
	<b>Examiner</b> Juan C. Ochoa	<b>Art Unit</b> 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Examiner Albert W. Paladini is no longer prosecuting this application. Examiner Juan Carlos Ochoa is taking over the prosecution of this application.
2. Applicant's arguments filed on 3/19/07 have been fully considered. The finality of that action is withdrawn.
3. Claims 1–30 are presented for examination.
4. Any previous indication of allowability of claims 1–30 is withdrawn.

### ***Drawings***

5. The drawings are objected to because of the following informalities:
6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:
7. As to Figure 1, page 8, lines 1 and 4 of the specification refers to “116” and not reference character 126 as labeled in Figure 1.
8. As to Figure 1, page 8, line 2 of the specification refers to “118” and not reference character 128 as labeled in Figure 1.
9. As to Figure 1, page 7, last line of the specification refers to “114” and not reference character 124 as labeled in Figure 1.
10. As to Figure 1, reference character “122” has been used to designate both “LAN/WAN/WiFi adapter” and “I/O adapter”. “LAN/WAN/WiFi adapter” should be 112, as noted in the specification.
11. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with

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37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

13. Claims 1–8, 11–18, and 21–30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. As to claim 1, lines 8-12 recite "traversing the internal body topology to identify a second element in a second wall side of the graphic model; measuring the distance between the first element and the second element; and storing a wall thickness, the wall thickness corresponding to the measured distance." After the first element is selected, the internal body can be traversed at varying angles. So the measured distance depends upon the angle taken to traverse the body.

15. As to claims 11, 21, they contain the same "measured distance depends upon the angle taken to traverse the body" deficiency as set forth above.

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16. As to claims 21 and 29, they claim "a computer program product tangibly embodied in a machine-readable medium". Specification does not define "machine-readable medium". Specification specifies "a machine usable medium" in page 15, line 2. There is no antecedent for "machine-readable medium" in the Specification. It is not clear if applicant meant machine-readable and machine usable interchangeably.

17. Dependent claims inherit the defect of the claim from which they depend.

***Claim Rejections - 35 USC § 101***

18. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

19. Claims 9, 10, and 19–30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

20. Specifically, claims 9, 19, and 29 do not produce a useful, concrete and tangible result. The claims, not being capable of imparting functionality, fail to reflect any described practical utility. Thus, there would be no "useful" result upon execution. No tangible result claimed, only an abstract idea. Determining the distance between the first element and the second element does not equate to tangibility.

21. Specifically, claims 21 and 29 are not limited to "a computer program product tangibly embodied in a machine-readable medium", which falls within a stature category of invention. "Signal bearing medium" and "Transmission type mediums such as digital and analog communication links", as specified for "a machine usable medium" in page 15, lines 2, 5, and 12–13, cover a form of energy not limited to embodiments, which are

tangible, physical articles or objects. Examiner notes that "embodied" does not mean stored.

22. Specifically, claims 21 and 29 recite software limitations and therefore the claims are directed to software per se, which is considered non-statutory subject matter. (See 112 Rejection of claims 21 and 29 above).

23. Dependent claims inherit the defect of the claim from which they depend.

### ***Response to Arguments***

24. Applicant's arguments filed on 3/19/07 have been fully considered, but the arguments are not persuasive for the 35 USC 112 2<sup>nd</sup> paragraph rejection.

25. With respect to the 35 USC 112 2<sup>nd</sup> paragraph rejection, the applicant states on page "With regard to claim 1, as described above, in some embodiments, the specification describes that the traversing is guided by the face normal at a point projected from a point on the surface element, and by the topology of the tetrahedral elements in the mesh. At any rate, the language of claim 1 is clear and definite and describes the steps of this embodiment clearly." The Applicant has not responded specifically to the examiner's analysis, which concludes, "the measured distance will depend upon the angle taken to traverse the body." Thus, the technique does not result in a single result. With respect to the Applicant utilizing the specification to limit the claim, this is contrary MPEP 2111 which states, "During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." The Federal Circuit's en banc decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO

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employs the "broadest reasonable interpretation" standard.". The specification is used as a dictionary to interpret the claims, but may not be used to further narrow the claims, as suggested by the Applicant's arguments. In other words, Examiner does not see these features expressed in the claims. Examiner is not allowed to bring limitations set forth in the description into the claims.

### ***Conclusion***

26. Any indication of allowability of the claims not rejected on prior art is being held in abeyance pending the manner in which applicant amends or responds to the above rejections.

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

28. Pre-Grant publication 20040186604, Onodera et al., teaches an analytical shell-model producing apparatus (see page 1, col. 2, paragraph [0008], lines 1-4), which in direction of a normal line (see page 1, col. 2, paragraph [0008], lines 23-24) calculates the plate thickness on each of the internal-surface models produced (see page 2, col. 1, 1st paragraph, lines 2-10).


29. Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan C. Ochoa whose telephone number is (571) 272-2625. The examiner can normally be reached on 7:30AM - 4:00 PM.

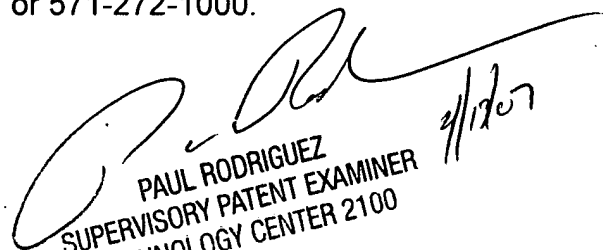
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31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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4/12/07

  
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4/12/07